Integration of Environmental and Agricultural (horticulture) Science

Current 10th grade HEMS members participated in an integrated hort and environmental activity that spanned over a 3 week period. The activity covered several concepts cross-linked between each of these courses. The characteristics of open and closed systems, the water cycle, nitrogen cycle, carbon cycle, phosphorous cycle, decomposition, photosynthesis, respiration, transpiration, scientific inquiry and investigation were all taught and reinforced during this hands-on activity. Students placed small pepper plants into a closed system 2liter bottle) and monitored their growth over the 3 week period. Students were asked to explain the presence of these concepts throughout their experiment using scientific investigation and thinking. It was an eye opener for many students, after they had predicted the death of their plant within a few days. The misconception was obvious they believed their plants would not survive without adding water, air, and supplemental nutrients. We believe this to be one of our more worhthwhile activities as it included all 10 of our sophomore HEMS members.

Kris Blasko/ HEMS Environmental Science Instructor

Micheal McDowal/ HEMS Horticulture Instructor